UNIVERSITAS ANDALAS

ANALYSIS OPTIMALITY CITY OF SIZE (CASE STUDY: PADANG MUNICIPALITY)

UNDERGRADUATE THESIS

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ABSTRACT

This research aims to determine the optimal city size of Padang Municipality and its implications for urban development planning. This research also aims to see the extent of the influence of the increase in the population of Padang Municipality on the increase in per capita city expenditure and per capita city income. Padang Municipality is the capital city of West Sumatera Province with an area of 694.96 km2 and the total population in 2020 according to the Statistics of Padang Municipality is 909,040 people. This study uses Time Series data with a span of 1981-2020. To analyze the data using econometric techniques, the method used to estimate is the OLS (Ordinary Least Squares) method using R-Studio software. For testing the results of the optimal regression calculation of city size, the equation is used, namely by testing the T-Test, R^2 Test and F-Test. This research uses quantitative descriptive because to obtain data that will be used such as; the population, Gross Regional Domestic Product and Regional Revenues and Expenditures Budget were obtained from the Municipality of Padang in Figures by Statistics Municipality of Padang. The results of calculating the optimal population of the Municipality of Padang using the Marginal approach were obtained at 1,389,878 people. The population of the Municipality of Padang until 2020 has not reached its optimal size. From the projected population of the Municipality of Padang, it can be seen that the optimal population of the Municipality of Padang will occur in 2042, in which year the population of the Municipality of Padang is estimated to reach 1,374,811 people.

Keyword: Optimal City Size, Population, Urbanization, Gross Regional Domestic Product, Regional Revenues and Expenditures Budget.

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